



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-1016; Project Identifier AD-2021-00625-E; Amendment 39-21936; AD 2022-03-19]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all General Electric Company (GE) Passport 20-17BB1A, Passport 20-18BB1A, and Passport 20-19BB1A model turbofan engines. This AD was prompted by a report of a manufacturing quality escape that requires a reduction to the life limit of certain high-pressure turbine (HPT) rotor stage 1 disks. This AD requires revising the airworthiness limitations section (ALS) of the existing maintenance manual and the operator's existing approved continuous airworthiness maintenance program (CAMP) to incorporate a reduced life limit for certain HPT rotor stage 1 disks. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact General Electric Company, 1 Neumann Way, Cincinnati, OH, 45215, United States; phone: (513) 552-3272; email: aviation.fleetsupport@ge.com; website: www.ge.com. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the

availability of this material at the FAA, call (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1016.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1016; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Scott Stevenson, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7132; fax: (781) 238-7199; email: Scott.M.Stevenson@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all GE Passport 20-17BB1A, Passport 20-18BB1A, and Passport 20-19BB1A model turbofan engines. The NPRM published in the *Federal Register* on November 29, 2021 (86 FR 67669). The NPRM was prompted by a report from GE of a manufacturing quality escape that identified a certain population of HPT rotor stage 1 disks that did not meet the design specification. GE determined that machining and inspection of the affected HPT rotor stage 1 disks was inconsistent with the engineering drawing. Further analysis by GE determined that the nonconformance at the forward and aft hooks of the HPT rotor stage 1 disks may cause the disks to fail prematurely and, therefore, the life limit of the affected HPT rotor stage 1 disks requires reduction. As a result, GE decreased the life limit of the affected HPT rotor stage 1 disks. In the NPRM, the FAA proposed to require revising the ALS of the GE Passport 20 Line Maintenance Manual, GEK 112062, and the operator's existing approved CAMP to incorporate a reduced life limit for certain HPT rotor stage 1 disks. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received one comment, from GE. The following presents the comment received on the NPRM and the FAA's response.

Request to Update Date of Service Information

GE requested that the FAA correct the date of GE Service Bulletin (SB) PASSPORT20-A-72-00-0116-00A-930A-D, Issue 002, in this AD from July 22, 2021, to August 13, 2021. GE commented that the NPRM included the date of the draft SB and not the date of the published SB. GE stated that there was no change to the document content between the draft and publication dates.

The FAA agrees and has revised this AD as requested.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed GE SB PASSPORT20-A-72-00-0116-00A-930A-D, Issue 002, dated August 13, 2021. This service information describes procedures for removing a certain population of HPT rotor stage 1 disks from service and provides serial numbers of the affected HPT rotor stage 1 disks. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Costs of Compliance

The FAA estimates that this AD affects 78 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Revise the ALS of the Line Maintenance Manual and the operator's existing approved CAMP	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$6,630

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-03-19 General Electric Company: Amendment 39-21936; Docket No. FAA-2021-1016; Project Identifier AD-2021-00625-E.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to General Electric Company (GE) Passport 20-17BB1A, Passport 20-18BB1A, and Passport 20-19BB1A model turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by a manufacturing quality escape that requires a reduction to the life limit for certain high-pressure turbine (HPT) rotor stage 1 disks. The FAA is issuing this AD to prevent failure of the HPT rotor stage 1 disk. The unsafe condition, if not addressed, could result in uncontained disk release, damage to the engine, and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Action

Within 120 days after the effective date of this AD, revise the airworthiness limitations section of the existing maintenance manual for your engine and the operator's existing approved continuous airworthiness maintenance program by adding Figure 1 to paragraph (g) of this AD.

Figure 1 to Paragraph (g) – Passport 20-17BB1A, Passport 20-18BB1A, and Passport 20-19BB1A Model Turbofan Engines and Life Limits

Part Name	Part Number	Affected Population by Serial Number	Life Cycles for Passport 20-17BB1A	Life Cycles for Passport 20-18BB1A	Life Cycles for Passport 20-19BB1A
HPT Rotor Stage 1 Disk	2471M11P02	Table 1 of GE Service Bulletin PASSPORT 20-A-72-00-0116-00A-930A-D, Issue 002, dated August 13, 2021	3,800	3,800	3,800

Note 1 to paragraph (g): Where Figure 1 to paragraph (g) refers to “Life Cycles,” for the purpose of this AD, this refers to life cycles since new.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i) of this AD. Information may be emailed to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

For more information about this AD, contact Scott Stevenson, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7132; fax: (781) 238-7199; email: Scott.M.Stevenson@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) General Electric Company Service Bulletin PASSPORT20-A-72-00-0116-00A-930A-D, Issue 002, dated August 13, 2021.

(ii) [Reserved]

(3) For service information identified in this AD, contact General Electric Company, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552-3272; email: aviation.fleetsupport@ge.com; website: www.ge.com.

(4) You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on January 26, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-03008 Filed: 2/11/2022 8:45 am; Publication Date: 2/14/2022]